

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A semiconductor laser device comprising  
a semiconductor multi-layer film formed by laminating optical confinement layers  
and active layers so as to dispose each of said active layers between said optical confinement  
layers;

a high reflection film coated on a first end of the multi-layer film perpendicular to  
junction planes of the individual layers in said semiconductor multi-layer film; and

a low reflection film coated on a second end of the multi-layer film opposite to the  
first end and comprising essentially  $\text{Al}_2\text{O}_3$  having a resistivity of  $1 \times 10^{12} \Omega\cdot\text{m}$  or more,

wherein the semiconductor laser device has a fault in time (FIT) number of  
approximately 1000 or less when calculated using the formula:  $\text{FIT} = (\text{fault number} \times$   
 $10^9)/(\text{operating time} \times \text{operating number})$ .

2. (Previously Presented) The semiconductor laser device according to claim 19,  
wherein said low reflection film is formed from a single layer.

3. (Original) The semiconductor laser device according to claim 1, wherein said low  
reflection film is formed from a plurality of layers.

4. (Original) The semiconductor laser device according to claim 3, wherein said  
plurality of layers are a composite film formed from a film comprised of said  $\text{Al}_2\text{O}_3$  and a  
film which contains Si and has a refractive index higher than that of said  $\text{Al}_2\text{O}_3$ .

5. (Original) The semiconductor laser device according to claim 4, wherein said film which has a refractive index higher than that of said  $\text{Al}_2\text{O}_3$  is selected from the group consisting of Si,  $\alpha$ (amorphous)-Si and SiN.

6. (Original) The semiconductor laser device according to claim 1, wherein said high reflection film contains a film comprised of at least  $\text{Al}_2\text{O}_3$  having a resistivity of  $1 \times 10^{12} \Omega \cdot \text{m}$  or more.

7. (Original) The semiconductor laser device according to claim 6, wherein said high reflection film is a composite film formed from a film comprised of said  $\text{Al}_2\text{O}_3$  and a film which contains Si and has a refractive index higher than that of said  $\text{Al}_2\text{O}_3$ .

8. (Currently Amended) A semiconductor laser device comprising:  
a semiconductor multi-layer film formed by laminating optical confinement layers and active layers so as to dispose each of said active layers between said optical confinement layers;

a high reflection film coated on a first end of the multi-layer film perpendicular to junction planes of the individual layers in said semiconductor multi-layer film; and

a low reflection film coated on a second end of the multilayer film opposite to the first end and comprising essentially  $\text{Al}_2\text{O}_3$  having a stoichiometric ratio composition,

wherein the semiconductor laser device has a fault in time (FIT) number of approximately 1000 or less when calculated using the formula:  $\text{FIT} = (\text{fault number} \times 10^9) / (\text{operating time} \times \text{operating number})$ .

9. (Original) A semiconductor laser device comprising a semiconductor multi-layer film formed by laminating optical confinement layers and active layers so as to dispose each of said active layers between said optical confinement layers, wherein one of the opposite ends perpendicular to the junction planes of the individual layers in said semiconductor multi-layer film is coated with a low reflection film and the other of said ends is coated with a high reflection film,

wherein said low reflection film contains a film comprised of  $\text{Al}_2\text{O}_3$  having a stoichiometric ratio composition.

10. (Original) The semiconductor laser device according to claim 9, wherein said low reflection film is formed from a single layer.

11. (Original) The semiconductor laser device according to claim 9, wherein said low reflection film is formed from a plurality of layers.

12. (Original) The semiconductor laser device according to claim 11, wherein said plurality of layers are a composite film formed from a film comprised of said  $\text{Al}_2\text{O}_3$  and a film which contains Si and has a refractive index higher than that of said  $\text{Al}_2\text{O}_3$ .

13. (Original) The semiconductor laser device according to claim 12, wherein said film which contains Si is selected from the group consisting of Si,  $\alpha$ (amorphous)-Si and SiN.

14. (Original) The semiconductor laser device according to claim 9, wherein said high reflection film contains a film comprised of at least  $\text{Al}_2\text{O}_3$  having a substantially stoichiometric ratio composition.

15. (Original) The semiconductor laser device according to claim 14, wherein said high reflection film is a composite film formed from a film comprised of said  $\text{Al}_2\text{O}_3$  and a film which contains Si and has a refractive index higher than that of said  $\text{Al}_2\text{O}_3$ .

16. (Original) The semiconductor laser device according to claim 15, wherein said film which has a refractive index higher than that of said  $\text{Al}_2\text{O}_3$  is selected from the group consisting of Si,  $\alpha$ (amorphous)-Si and SiN.

17. (Previously Presented) The semiconductor laser device according to any one of claims 1 to 16, wherein said  $\text{Al}_2\text{O}_3$  film is deposited by an electron cyclotron resonance plasma sputtering process.

18. (Currently Amended) A semiconductor laser device comprising:  
a semiconductor multi-layer film comprising at least one confinement layer and at least one active layer;

a high reflection film substantially perpendicular to the semiconductor multi-layer film; and

a low reflection film substantially perpendicular to the semiconductor multi-layer film, wherein the low reflection film comprises essentially  $\text{Al}_2\text{O}_3$  having a stoichiometric ratio composition,

wherein the semiconductor laser device has a fault in time (FIT) number of approximately 1000 or less when calculated using the formula:  $\text{FIT} = (\text{fault number} \times 10^9) / (\text{operating time} \times \text{operating number})$ .

19. (Previously Presented) The semiconductor laser device according to Claim 1, wherein said resistivity of said  $\text{Al}_2\text{O}_3$  film being in an inclusive range of  $1 \times 10^{12}$  through  $1 \times 10^{14} \Omega \cdot \text{m}$ .

20. (Currently Amended) A semiconductor laser device comprising:  
a semiconductor multi-layer film formed by laminating optical confinement layers and active layers so as to dispose each of said active layers between said optical confinement layers;

a high reflection film coated on a first end of the multi-layer film perpendicular to junction planes of the individual layers in the semiconductor multi-layer film; and

a low reflection film coated on a second end of the multi-layer film opposite to the first end and comprising  $\text{Al}_2\text{O}_3$  having a resistivity of  $1 \times 10^{12} \Omega \cdot \text{m}$  or more, wherein the individual layers forming the semiconductor multi-layer film each being made of a semiconductor material simultaneously containing Ga and at least one of In, As, P and Al, and

wherein the semiconductor laser device has a fault in time (FIT) number of approximately 1000 or less when calculated using the formula:  $\text{FIT} = (\text{fault number} \times 10^9) / (\text{operating time} \times \text{operating number})$ .

21. (New) A semiconductor laser device formed by the process comprising:  
forming a semiconductor multi-layer film by laminating optical confinement layers and active layers so as to dispose each of said active layers between said optical confinement layers;

forming a high reflection film coating on a first end of the multilayer film substantially perpendicular to junction planes of the individual layers and said semiconductor multilayer film; and

forming a low reflection film coated on a second end of the multilayer film opposite the first end, wherein at least one of the high reflection film and low reflection film is formed such that the film comprises  $\text{Al}_2\text{O}_3$  having a resistivity of  $1 \times 10^{12} \Omega \cdot \text{m}$  or more.

22. (New) The semiconductor laser device of Claim 21, wherein said forming at least one of the low reflection film and the high reflection film comprises depositing an  $\text{Al}_2\text{O}_3$  film by an electron cyclotron resonance plasma sputtering process.